

Claims

[c1] WHAT IS CLAIMED IS:

1. A shaping tool for manufacturing plastic housing parts for electrical devices, wherein the shaping tool comprises:

- a frame;
- at least one cavity element arranged in the frame;
- a tool structure, wherein the frame and the at least one cavity element are connected detachably to the tool structure;
- sliding blocks connected detachably to the tool structure;
- wherein the frame is comprised of several frame parts, wherein a lateral surface of each one of the frame parts rests against a longitudinal lateral surface or a transverse lateral surface of the at least one cavity element, respectively;
- wherein the frame parts and the at least one cavity element have first recesses having sidewalls, wherein the sidewalls rest against lateral surfaces of the sliding blocks.

[c2] 2. The shaping tool according to claim 1, wherein the

first recesses in the frame parts and the at least one cavity element are positioned adjacent to one another such that neighboring ones of the recesses receive a common one of the sliding blocks.

- [c3] 3. The shaping tool according to claim 1, wherein the tool structure has second recesses, wherein the sliding blocks are secured in the second recesses of the tool structure, and wherein the second recesses have lateral surfaces resting flat against the lateral surfaces of the sliding blocks.
- [c4] 4. The shaping tool according to claim 3, wherein the second recesses in the tool structure are positioned such that the sliding blocks secured in the second recesses projects with a lateral surfaces into one of the first recesses, respectively.
- [c5] 5. The shaping tool according to claim 1, wherein at least one structural component selected from the at least one cavity element, the frame part, and the tool structure has a projection projecting past planar contact surfaces of the at least one structural component and having surfaces projecting into the first recess or the second recess of a neighboring one of the structural components, wherein the surfaces of the projection rest flat against surfaces of the first recess or the second recesses of the

neighboring structural component.

- [c6] 6. The shaping tool according to claim 1, wherein at least one of the sliding blocks and the first and second recesses have hardened surfaces.
- [c7] 7. The shaping tool according to claim 1, wherein the individual frame parts are detachably connected to the tool structure, wherein the size of the at least one cavity element, of the frame parts, and of the tool structure are matched to one another such that the at least one cavity element and the frame parts are combinable as a single cavity shaping tool, a double cavity shaping tool, a quadruple cavity shaping tool, or multiple cavity shaping tool.
- [c8] 8. The shaping tool according to claim 7, wherein the lateral surfaces of the frame parts have a frame part length matching a length of the longitudinal lateral surface of the at least one cavity element, when the lateral surfaces of the frame part are arranged on the longitudinal lateral surface of the at least one cavity element, or matching a width of the at least one cavity element, when the lateral surfaces are arranged on the transverse lateral surface of the at least one cavity element.
- [c9] 9. The shaping tool according to claim 7, wherein hole

patterns of the at least one cavity element, the frame parts, and the tool structure of openings receiving injectors, nozzles, slides, and heating or cooling channels match one another at contacting surfaces of the at least one cavity element, the frame parts, and the tool structure.

- [c10] 10. The shaping tool according to claim 7, wherein several exchangeable cavity elements are provided, wherein hole patterns of the cavity elements and of the tool structure of openings receiving injectors, nozzles, slides, and heating or cooling channels match one another at contacting surfaces of the cavity elements and of the tool structure, wherein, when a first one of the cavity elements is removed from the tool structure, a second one of the cavity elements is detachably mounted on the tool structure.
- [c11] 11. The shaping tool according to claim 10, wherein the exchangeable cavities have different cores.
- [c12] 12. The shaping tool according to claim 10, wherein the exchangeable cavities have identical cores.
- [c13] 13. The shaping tool according to claim 1, wherein structural components of the at least one cavity element, of the tool structure, and of the frame parts are detach-

ably connected with one another, and wherein each one of the structural components in combination with other structural components having an identical structural component-specific shape can be combined and connected to form a new shaping tool.

[c14] 14. The shaping tool according to claim 1, wherein the shaping tool has an ejector side substantially comprised of the at least one cavity element, the frame parts of the frame, and the tool structure, wherein the at least one cavity element has a contour-forming shaping surface, openings for ejectors and ejector slides as well as channel bores for a heating liquid or a cooling liquid, wherein the frame parts of the frame have contact surfaces for contacting individual structural components of the at least one cavity element, wherein the tool structure has devices at the ejector side for attaching the at least one cavity element and the frame parts and further has a hole pattern enabling penetration of the ejector slide and the ejectors into the at least one cavity element.

[c15] 15. The shaping tool according to claim 14, wherein the shaping tool has a hot side substantially formed by the at least one cavity element, the frame parts of the frame, and the tool structure, wherein the at least one cavity element has a contour-forming shaping surface, opening for the ejector slides, nozzles, and channel bores for the

heating liquid or the cooling liquid, wherein the frame parts of the frame have contact surfaces for contacting individual structural components of the at least one cavity element, and wherein the tool structure has devices at the hot side for attaching the at least one cavity element and the frame parts and further has a hole pattern enabling penetration of the nozzles into the at least one cavity element.

[c16] 16. The shaping tool according to claim 15, wherein the shaping tool comprises of a shaping tool part on the ejector side and a shaping tool part on the hot side.

[c17] 17. A method for manufacturing a shaping tool according to claim 1, comprising the step of:
providing a tool structure;
providing a frame comprised of individual frame parts;
providing at least one cavity element;
detachably mounting the at least one cavity element and the individual frame parts as individual structural components on the tool structure.